

## State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE RESOURCES

Governor
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March 28, 1991

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DIVISION OF OIL GAS & MINING

Ken A. Kluksdahl, Mine Manager Tenneco Minerals P.O. Box 2650 St. George, UT 84770

Dear Mr. Kluksdahl:

I would like to thank you for taking the time to tour the new solution ponds and discuss the recent cyanide solution release at the Goldstrike Mine. As a follow-up to our discussions I would like to clarify our position and provide you with the following information.

- From our investigations conducted on March 6 and 26, we conclude that few, if any, wildlife mortalities resulted from the solution water release.
   This includes both aquatic and terrestrial species.
- 2. A report of the actual release and water quality testing conducted by Tenneco should be submitted to this office when completed. We understand this will be completed in 2-3 weeks.
- 3. The two solution ponds created on the leach pads will require a minimum of 2 propane cannons for each pond, operating at approximately 1-3 minutes/blast. Regular patrol of at least twice daily should be conducted to ensure that the cannons are in good operating order.

Should these ponds be necessary for an extended time period (over a month), you should secure and install a cover over them. There are various materials and nettings available for this purpose.

The peak waterfowl migrations for your location are between Feb. 1-April 30 and Sept. 1-Nov. 30 each year. Particular care should be taken during these time periods to eliminate any waterfowl losses; however, the above mentioned measures will be necessary year-long to prevent incidental losses. Any waterfowl mortalities should be reported immediately to this office so that corrective measures can be formulated.

Mr. Ken A. Kluksdahl March 29, 1991 Page 2 You should research the possibility of creating an attractive pond site adjacent to the solution ponds, but away from the mine and/or activity zone. This pond could be located off the mine site, but should include establishment of aquatic vegetation such as pondweeds and cattails. There may be potential to establish vegetation in your sediment pond for this purpose; however, due to its location far down in the canyon, it may receive little use. In any event, the establishment of such a pond could act as an attractant to migrating waterfowl and steer them away from solution ponds. The covers and weights you are presently using for the leach pad solution ditches look very good. This program should be continued. Also, the "aggressive" style covered berms (wide and high) appear to work well as deterrents to wildlife use of solution waters. We commend you on this design and encourage its use in the future. Thank you once again for your time and consideration for the State's wildlife resource. Should you require further assistance from this office, please feel free to contact us. Sincerely, Bus y. Boulmake Bruce L. Bonebrake Habitat Program Manager BLB/FCJ/vt cc: F. Clair Jensen Ralph Miles Wayne Hedberg (Oil, Gas & Mining) John Schijf Catherine Quinn